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Coping strategies at the ages 8, 10 and 12

Abstract

The aim of our cross-sectional research was to investigate some coping strategies which determine school-age children's pro-social and aggressive behaviours in stressful situations and to reveal associations between these strategies and some background factors, such as age, gender and mothers'educational level. The sample of the empirical study consisted of 167 (8, 10 and 12 years) Hungarian children from four schools. Instruments that were used: Coping strategy teacher-report and self-report questionnaires. On the basis of the results, the self-report questionnaires showed that overt aggression as coping strategy was used by the oldest children in a significantly ($p<0.05$) higher proportion than by the younger children. The 8-year-old children ask for help more often than the older students. In the oldest age group, boys were rated significantly ($p<0.05$) more aggressive than girls. According to the teachers, overt aggression was used in a significantly ($p<0.05$) higher proportion by the oldest children, and the 8-year-old children ask for help and vent more often. The 10- and 12-year-old boys were rated significantly ($p<0.05$) more aggressive than girls, and the girls are more helpful than boys. Data obtained by the self-report and the teacher-report questionnaires showed moderate correlations among the 8- and 10-year-olds children ($r=0.42$ and 0.51; $p<0.05$) but in the case of the oldest group the score of correlation is lower ($r=0.25$; $p<0.05$). As for social background, our data suggest that mothers' educational qualifications are not strongly related to children's coping strategies in none of the age-groups ($r=0.25–0.39$).

keywords: coping, coping strategies, school-age children

Introduction

The major goal of this study was to investigate coping strategies that determine 8, 10 and 12-year old children's pro-social and aggressive behaviours in stressful situations. Specific objectives included: to describe the developmental level of coping strategies at the ages of 8, 10 and 12, to investigate the relationship between coping strategies and age and gender, to examine the relationship between different raters' judgements on children's coping strategies in stressful situations.

International surveys agree that social competence is a very important factor for both individuals' inner balance and for a satisfactory social co-existence (e.g. Bremer &Smith, 2004, Van der Zee, Thijs, & Schakel, 2002). The functioning of social competence is a factor that is vital for the success of learning as well. Coping strategies are essential components of social competence. Knowledge of the development of coping strategies contributes to the creation of an adequate learning environment for children.

Both aggressive and pro-social forms of behaviour play a significant role in coping with different frustrating situations. Aggression is usually defined as behaviour that is intended to cause harm or pain to another person (verbally or physically) or to damage the physical environment, or objects and living beings in the environment (Atkinson, Atkinson, Smith, & Bem, 1993; Anderson & Bushman, 2002). Similarly to aggression, pro-social actions are intentional too, and it is socially determined what serves others best (Fiske, 2006).

Both aggressive and pro-social forms of behaviour play a significant role in coping with different frustrating situations. Several coping strategies can be applied. By applying these strategies the individual makes cognitive and behavioural efforts to solve the particular situation (Margitics, & Pauwlik, 2006; Englert, Bertrams, & Dickhauser, 2011). The frequency and efficiency of the use of different coping techniques have been identified mainly in teenagers and adults but according to recent research results coping models contain several elements which can be found at an earlier age, even in nursery-school children.

Many psychological theories have been worked out to interpret and exam coping. Early theories (e.g. Byrne, 1964) consider coping as a stable, durable characteristic of personality: reactions to stress depend on the environment but to a negligible extent, people tend to choose basically the same strategies (like avoidance or aggression) when it comes to solving various problems.

Psychoanalysis (Freud, 1964) regards coping as those ego-maneuvers, by which the ego handles external threats. Based on this approach, Haan (1977) made a distinction between coping and defence: the former is conscious (based on an evaluation), and determines the behaviour of the individual in case of external threat; the latter is unconscious, and it is the means by which the ego handles intrapsychic conflicts.

In contrast, the transactionalist approach of Lazarus (1966) defines coping as one of those regulators of behaviour that moderate the interaction between the individual and its environment in non-appropriate (i.e. unusual, disturbing, unpleasant) situations. Cognitive evaluation plays a key role in this, and thus coping - in contrast to earlier theories - is not an emotion-evoked response, as both emotions and coping are considered as results of that evaluation (Oláh, 2005). Some components of coping strategies are of evolutionary origin (like aggression as behavioural regulator), the rest one learns through socialization. The efficacy and interactions of these mechanisms are largely influenced by family members, educators, peers and indirect factors of socialization, like the media (Bereczkei, 2003; Csányi, 1999). According to Grusec and Hastings (2007) the strength of this influence is determined by the amount of time spent together, the power- and communicative relations and the level of consciousness of the parties.

According to Lazarus and Launier (1978) as well as Lazarus and Folkman (1984), individuals use two basic types of coping technique: the problem-focused and the emotion-

focused strategies. In the case of the problem-focused technique the individual makes an attempt to solve, avoid or modify the problem by focusing on the problem or the situation in order to be able to avoid it in a similar situation. During the coping process the individual can apply several coping strategies, which may aim at the problematic situation and also on the individual or individuals themselves, and their application is in close relation with the development of several cognitive areas, for example the development of problem-solving skills.

In the case of the emotion-focused strategy the main purpose is to resolve and soothe emotional reactions evoked by certain situations, and to surmount overwhelming negative emotions, moreover, we also use this strategy when the situation cannot be changed (Lazarus, 1990). The application of this strategy also depends on the level of development of cognitive areas, however the relation is smaller-scale than in the other strategy, and the emotion-focused strategy is in a closer relation with how the nervous system works.

During their research, Lazarus and Folkman (1986) differentiated among eight strategies concerning problem-focused and emotion-focused coping techniques: (1) confrontation, (2) escape-avoidance, (3) avoidance (4) emotion and behaviour control, (5) looking for social support, (6) responsibility acceptance, (7) planning problem-solving, and (8) looking for positive reappraisal.

Confrontative coping means goal-oriented coping that is, facing the problem, while escape-avoidance is just its opposite, quitting the situation rather than facing it. Distancing is an emotional and intellectual detachment from the actual situation, aimed at gathering strength for further coping. Self-controlling is an intensive search for (and application of) the most efficient ways emotional and behavioral expression in the given situation. Seeking social support means that the individual uses the resources of the immediate social environment for the purposes of coping. When accepting responsibility, the individual undertakes the perceived and attributed control. Planful problem-solving is a cognitive evaluation of all the possible solutions. By positive reappraisal a kind of re-evaluation is meant, through which the individual can at least partially turn the frustrating experience into a challenge and ascribe positive meaning to it (Lazarus, & Folkman, 1986)

Dombeck and Wells-Moran (2006) developed a three-level model incorporating the strategies known from former empirical studies. The levels refer to the central element of coping and efficacy. The least efficient and mostly emotional strategies occupy the low level. These include denial, tantrums, crying and frustrated fits of laughter. Strategies of the medium level contain more cognitive elements, and their primary goal is withdrawal (e.g. isolation, repression, rationalization and displacement). Strategies of the high level are aimed mainly at solving the actual problem, and defence only to a lesser extent; these strategies use the most elaboration (e.g. accepting responsibility and facing the problem, positive reappraisal, seeking social support). The authors argue that strategies of each level may become dominant in different life periods, with considerable individual variability even at the earliest ages.

This seems to be corroborated by the observations of Tremblay, Masse, Perron, LeBlanc, Schwartzman and Ledingham (1992), according to which even kindergarten children apply strategies categorized as high-level in the model, while low-level strategies are to be found among adolescents and young adults as well. Tremblay and his colleagues (1992) showed that during the kindergarten years, and even among 7-10-year-olds, the most frequent strategies to solve frustrating interpersonal problems are verbal and physical aggression, seeking the help of an adult or peer, avoidance and venting.

We found similar results in our two-year longitudinal study conducted with kindergarten children between 2006 and 2008 (Zsolnai, Kasik, & Lesznyák, 2009; 2011). One tendency we could identify is that active forms of coping like overt aggression (verbal and

physical aggression), resistance and negotiation gain on significance with age, while passive forms like adult-seeking, venting and avoidance weaken.

Method

Participants

Our cross-sectional research was carried out in a Hungarian context. 167 children (8, 10 and 12 years) from four elementary schools in Szeged (one of the largest cities in Hungary) took part in our investigation. All children were from Hungarian-speaking families, and all of them had parental permission to participate in the study. Girls and boys were approximately equally represented in each age-group with girls being slightly over-represented (~5%). The size of the subsamples with regard to age (8=52; 10=57; 12=58) was approximately the same. The sample represented a range of Hungarian mothers' educational levels (elementary school=15%; vocational school=33%; high school=40%; college or university degree=12%). Teachers (N=9) also participated in the research, they rated children. The data collection was carried out in May 2010. The students filled in the questionnaire at school in the classroom. Teachers filled in the questionnaire without getting to know the students' answers.

Mesures

Two research instruments were used in our study: Coping strategy self-report and teacher-report questionnaires. The social and amotional skills related to coping strategies in school situations were assessed by own questionnaire (Zsolnai & Kasik 2010) which was based on Tremblay-questionnaire and Fabes and Eisenberg's instrument (Fabes & Eisenberg, 1992; Tremblay et al. 1992). The reactions of the child were coded into nine categories which were based on those used by other researchers (e.g. Cummings, Zahn-Waxler, & Radke-Yarrow, 1981; Fabes, & Eisenberg, 1992). These categories were solely behavioural and we did not code cognitive coping responses. The behavioral coping categories used were as follows: *physical aggression* (PA), *verbal aggression* (VA), *resistance* (RE), *venting/crying* (VE), *avoidance* (AV), *teacher-seeking* (TS), *peer-seeking* (PS), *following the norms* (FN), *following teacher's instructions* (TI). Each appropriate response category received a proportion score ranging from 0 to 1.

The Coping Strategies Questionnaire sheds light on the functioning of social and emotional skills that affect coping with negative and frustrating school events (Table 1). In 10 questions children must decide what they would do in a situation that is frustrating for them (e.g. *What do you do, if one of your classmates disturbs you while you are trying to learn?*) and 11 questions refer to situations where the child's classmate gets into trouble (e.g. *What do you do, if one of your classmates falls down and starts to cry?*). For each situation, there are nine possible answers (e.g. *I call the teacher. I begin to cry too. I quarrel with him/her. I go away. I get angry with them.*), and the child should choose the one that best describes what he/she would do in a similar situation. Teachers were also asked to give characterizations of the children by the same questionnaire (e.g. *What does XY do if one of his/her classmates falls down and starts to cry?*). The child and the teacher versions share the same structure and items.

Table 1 here

As for rating, questionnaires of teachers and students were rated separately. In both cases the chosen strategy got 1 point, while the unchosen ones 0. The reliability of our own instruments is acceptable, Cronbach-α values ranging from 0.81 to 0.87 (reliability indices: 0.81; 0.83; 0.85, in age order of the subsamples, from the youngest up). In the case of teachers reliability was even higher (reliability indices: 0.85; 0.87; 0.86, in the same order as before).

Results

Situations frustrating for the self / self- report data and teachers' ratings

Our questionnaire features 10 school situations that may frustrate children themselves. These situations and the differences between how students and teachers rate them are summarized in Table 2. Analysis of student questionnaires yielded significant differences in four situations (1, 5, 6 and 9), while in the case of teacher questionnaires, this number is only three (4, 5 and 9). Level of significance was set at $p<0.05$.

Table 2 here

According to the differences revealed by the crosstable analysis (Appendix: Table 3), based on their self-report (i.e. student questionnaire), eight-year-olds prefer to ask for their teacher's help in these situations. Furthermore, if personal property is taken away from them or they are disturbed when playing, they characteristically react by verbal aggression; mocking mostly evokes crying, and the response to physical aggression is physical aggression in most cases. As far as teachers' values are concerned, they think that the usual responses to being disturbed (either when studying or when playing) are seeking teacher's help and verbal aggression. The general responses to physical aggression - in the teachers' opinion - are seeking teacher's help and physical aggression.

Ten-year-olds - similarly to 8-year-olds - tend to seek their teacher's help if some personal property is taken away from them, and they also frequently use verbal and physical aggression in such cases (Appendix: Table 4). Unlike their younger peers, these children react to mocking and physical aggression mostly by warning the aggressive peer to follow the norms, but physical and verbal aggression appear as well.

Teachers rate these situations somewhat different: just like the eight-year-olds, they consider seeking teacher's help the most characteristic strategy in all these situations, verbal aggression as the most frequent response to being disturbed while studying or playing, and physical aggression as the usual response to physical mistreatment.

Twelve-year-olds seek teacher's help quite infrequently (Appendix: Table 5). If disturbed while playing, mocked or mistreated, they respond most frequently by warning to follow the norms, but also by physical and verbal aggression. Teachers think that the most frequent strategies that these children use when disturbed while studying are avoidance and warning to follow the norms. In cases of physical aggresson, physical aggression and seeking peer help are the most frequent strategies.

Self-report questionnaires revealed no significant age-related differences (at $p<0.05$) in strategy choice in six of the examined situations (2, 3, 4, 7, 8 and 10.). Teachers consider that strategy choice in seven of the examined situations (1, 2, 3, 6, 7, 8 and 10.) was age-invariant. Students not willing to do a task respond mostly by avoidance and verbal

aggression. At the same time, refusing to do a task due to self-perceived incapacity to do it leads to seeking peer or teacher help most of the time. If disturbed when learning, they prefer shouting at the disturbing peer as a form of verbal aggression, and avoidance. The usual response to being scloded by the teacher either for misbehaviour or not doing a task properly is almost invariably following the teacher's instructions. Against annoying peers, these children implement physical and verbal aggression most frequently.

Teachers think that the most frequent strategies applied by students when they refuse to do a task (for either of the two examined reasons) are verbal aggression and avoidance. Teachers consider verbal and physical aggression the strategies of choice in case of being mocked, being annoyed or if a peer takes a personal object away. Just like their students, teachers think that when scolded, students tend to respond by following the teacher's instructions.

Situations frustrating for the self / gender differences

Considering the total sample, eight situations could be identified that exhibit significant gender differences ($p<0,05$ in all cases). Table 6 summarizes these relations.

Table 6 here

If the teacher - either for unsatisfactory work or misbehaviour - scolds the child (7 and 8), both girls and boys and at all ages - according to both raters – choose the same strategy: they try to conform to their teacher's expectations. Based on self-report, it is in four situations (1, 2, 6, and 9) there is significant difference between girls and boys in strategy choice at all ages. If a peer takes some personal property of theirs away, boys use verbal aggression in response in a greater proportion (8 years=32%; 10 years=28%; 12 years=60%) than girls. 8- and 10-year-old girls tend to seek teacher's help more often (8 years=42%; 10 years=40%), while 12-year-old girls rather seek peer help (35%). According to teachers, boys tend to use physical aggression at all ages more than girls (8 years=20%; 10 years=32%; 12 years= 9%).

Responses to mocking: self-report reveals that 8-year-old girls prefer seeking teacher's help (59%), while girls of 10 and 12 years prefer warning the other to follow the norms (10 years= 45%; 12 years= 43%). Teacher-reports in this respect show a slightly different picture. They think that significant differences are to be found only in the two younger age-groups, and the teacher-perceived strategies of choice are not entirely identical to those reported by the children. As in, boys prefer physical aggression (8 years= 15%; 10 years= 22%), while girls prefer seeking teacher's help (8 years= 46%, 10 years= 38%).

When unwilling to do a task, students' self-reports data show that 10- and 12-year-old boys choose mostly verbal aggression (10 years= 54%; 12 years= 60%), while 8-year-old girls seek peer help (62%). In the same situation the teachers' report shows that physical aggression is most common in 10-12-year old boys (10 years: 52%; 12 years: 58%). Teachers perceive girls as seeking teacher's help in such a situation (10 years= 66%; 12 years= 61%).

As for physical mistreatment, students' self-reports almost absolutely correspond to teacher reports. In all 3 age-groups there are boys who tend to choose physical aggression more often (between 35% and 68 %, all ages, both raters). It has to be added, however, that according to teacher reports, 12-year-old girls prefer seeking peer help (33%).

In the case of the self-report, the situation 5 can be characterized by significant gender-related difference only in 8-year-olds, situation 3 shows gender-related difference in

10- and 12-year-olds, while strategy choice in situation10 differed significantly between genders at all three studied ages. Girls' and boys' choice in this latter situation (10.) is differed from the teachers' ratings. When 8-year-olds are disturbed while playing, girls choose verbal aggression in response more often than boys (31%).

As far as the two older age-groups are concerned, if they refuse to do a task they think they are unable to do it, girls respond frequently by seeking adult help (10 years=42%; 12 years= 44%). Being annoyed evokes physical or verbal aggression in boys more often than in girls in all studied age-groups (between 35% and 52 % for the total sample).

Situations frustrating for a peer / self- report data and teachers' ratings

Out of the 21 questions, 11 represent situations frustrating primarily for a peer. In situations 1, 9 and 11, both self-reports and teacher-reports reveal significant age-related differences, while strategy choice in response to situation 10 differs significantly between ages only according to self-reports (Table 7).

Table 7 here

According to the differences revealed by the crosstabs analysis (Appendix: Table 8) among 8-year-olds the preferred strategies in all situations are warning to follow the norms, avoidance, resistance and seeking teacher's help, except for when a peer is crying. Seeking teacher's help is applied in all situations to proportions very similar to situations frustrating primarily for the self. When a peer is crying - children and teachers seem to agree - children prefer offering help to that peer themselves immediately.

Teachers view this age-group quite similarly. They think that the most common strategies are warning to follow the norms, seeking teacher's help and direct help, while they rate resistance and avoidance as less frequent.

Ten-year-olds' self-reports reveal that avoidance, warning to follow the norms, verbal aggression and direct help are the most frequently chosen strategies. In cases when some personal property is taken away from a peer or a peer is mistreated by another, strategy choices of these children are similar to those of eight-year-olds, while situations when a peer is annoyed or crying yield responses significantly different from those of the youngest – which characterizes 12-year-olds as well. Teachers report that ten-year-olds in the above mentioned situations choose primarily verbal and physical aggression and avoidance (Appendix: Table 9).

Twelve-year olds' self-reports data show that they prefer verbal aggression in these situations, except for a peer's crying, in which case they tend to choose either direct help or avoidance. Teachers add that they also use physical aggression and resistance (Appendix: Table10).

Students reported seven (2-8), while teachers find eight situations (2-8 and 10) as evoking similar strategy choices regardless of age. Avoidance is the strategy of choice if a peer is unwilling to carry out a task, but seeking adult help is added to this if the peer refuses to carry that task out because of incapability to do se. If a peer is disturbed by another while studying or playing, warning to follow the norm is chosen most often. If a peer is scolded, the same strategy is applied. The same situations are rated quite differently by teachers, especially in the case of 12-year-olds: in teachers' opinion, these children apply verbal aggression most often, in both cases of task refusal, and the same holds for mocking. In cases of disturbing, teachers think verbal and physical aggression are the most frequently appearing responses. Finally, if a peer gets scolded, children either avoid the situation or participate by referring to the norm.

Situations frustrating for a peer / gender differences

Six and four situations out of the eleven are characterized by significant gender-related differences in strategy choice (at $p<0.05$), based on self- and teacher reports, respectively. Table 11 summarizes these connections. As can be seen, there is not a single situation in which significant gender-related difference could be found between all the three examined age-groups. The ratings of children and their teachers are quite different- especially in the oldest group.

Table 11 here

Avoidance is chosen by both girls and boys in cases of refusal when a peer cannot do a task, but when the peer is simply unwilling, 10 and 12-year-old girls choose warning to follow the norms more often (10 years= 49%; 12 years= 59%) than boys (10 years= 31%; 12 years= 28%).

If a peer takes some personal property away from another, it does not make any significant difference in strategy choice in the two younger groups, however, 12-year-old boys choose verbal aggression more often (50%) than girls of the same age (30%). Teachers perceive physical aggression as more often occurring in response to the same situation in boys of this age (52%) than in girls (26%).

Upon perceiving mocking against a peer, both girls and boys of all ages turn to verbal or physical aggression in all three subsamples. Significant difference between the genders is reported only by teachers. According to them, 8 and 10-year-old boys tend to use significantly more physical aggression (8 years= 45%, 10 years= 51%).

Situations involving perception of physical mistreatment evoke significantly different strategy choice in the two older age-groups. 10-year-old girls choose warning to follow the norms significantly more often (51%), while 12-year-old boys seem to prefer physical and verbal aggression (45% both).

As for annoying, only teachers report that girls of the youngest group prefer referring to the norms as a solution (54%). Teachers also report that 12-year-old boys prefer avoidance if they see a peer crying (56%). In the case of eight-year-olds, self-reports reveal a significantly more infrequent appearance of seeking adult help, as compared to girls (47%).

Five situations (3, 4, 5, 7 and 8) did not reveal significant gender-related differences. If a peer gets scolded for misbehavior or unsatisfactory work (7 and 8), both girls and boys prefer warning the peer to behave as expected. If a peer is disturbed by another while either studying or playing (4 and 5), girls and boys of all subsamples warn the disturbing peer to follow the norms. If a peer cannot carry out a task, the most often chosen strategy is avoidance.

Correlations between self-report and teacher-report data

Our previous longitudinal study of kindergarten children (Zsolnai, Kasik, & Lesznyák, 2009) shows that the rating of children and their teachers are increasing in correlation during the three kindergarten years (first grade $r=0.20$; second grade $r=0.29$; third grade $r=0.41$ at $p<0.05$).

This tendency cannot be identified in schoolchildren, in fact, it seems to be reversed. 8-year-olds' value ($r=0.42$; $p<0.05$) - which is quite similar to that of the third grade of

kindergarten - , is significantly different from the value of ten-year-olds ($r=0.51$; $p<0.05$), as revealed by a z-test at $p<0.05$. The correlation is quite low in the case of 12-year-olds ($r=0.25$; $p<0.05$) - in fact, it is similar to the correlation seen in the first grade of kindergarten. The connection between students' and teachers' reports is increasing with age.

Correlations between students' coping strategies and mother's highest qualification

According our earlier studies conducted with kindergarten children, schoolchildren and adolescents (e.g. Kasik, 2010; Zsolnai, 2002; Zsolnai, Kasik, & Lesznyák, 2008a), functioning of the psychological processes determining social behaviour is strongly related to several factors of the family background. The most important of these family factors include family type, parents' social skills, parents' highest qualification, and - although to a lesser extent – the family's material circumstances.

In this study only mothers' highest qualification was study. At the ages 8 and 10, correlations are almost the same as those found in our kindergarten study (Zsolnai, Kasik, & Lesznyák, 2009). Furthermore, these two age-groups are characterized by very similar values (situations frustrating primarily for the self: $r=0.24–0.39$; situations frustrating primarily for peer: $r=0.15–0.28$). Among 12-year-olds, however, we found significantly lower correlations (situations frustrating primarily for the self: $r=0.14–0.21$; situations frustrating primarily for peer: $r=0.12–0.20$, at $p<0.05$).

The r values are the highest for verbal and physical aggression ($r=0.36$ and 0.39, respectively), and the lowest for peer being scolded and disturbance while studying and playing ($r=0.12$; 0.15 és 0.16, respectively).

Conclusions

The purpose of our investigation with schoolchildren (8, 10 and 12 years) was to discover which strategies influence prosocial and aggressive behaviour in stressful situations and to reveal the relations between these strategies and some background variables. Strategies were measured by a questionnaire (child- and teacher-version).

Based on self-reports, the two older age-groups' strategy choices are quite similar, however, teachers report that the oldest subasmple differs significantly (as reflected by values of correlation). According to similar studies, at the beginning of adolescence, there is shift in strategy choices, the most remarkable example of which is the increasingly frequent use of verbal aggression (e.g. Pruitt, 1998; Englert, Bertrams, & Dickhauser, 2011; Fiske, 2004). This characterizes our sample as well, especially in cases of being annoyed, mocked, or having personal property taken away.

The finding, according to which the frequency of verbal aggression increases both in situations frustrating primarily for the self and for a peer, is somewhat in contradiction with earlier studies. Fiske (2004), for instance, proposes that a situation that is frustrating primarily for a peer, does not evoke this reaction significantly often, rather, it is avoidance that children prefer in such cases, and therefore, it is the frequency of this strategy that increases.

Another very important result is that if a teacher scolds a child (either for misbehaviour or unsatisfactory work), children of all examined ages tend to make efforts to obey and follow the rules. This is true for situations involving a peer being scolded as well – except for 12-year-olds.

We found fewer gender differences than expected. Children indicated no gender differences whatsoever, whereas teachers observed differences between boys' and girls' behaviour. A plausible explanation for this is that children may miss certain aspects of their

own behaviour when making self-reflections. On the other hand, it is possible that teachers as fully-socialized adults view children through the spectacles of their own gender stereotypes, and perceive differences where there are none. Certainly, it cannot be excluded that both mechanisms are at play at the same time. Anyway, whenever gender differences were found, they were in line with gender stereotypes, boys displaying more overt aggression and girls engaging in more venting (Ostrov and Keating, 2004).

Our data show that eight and ten-year-olds' and their teachers' opinions prove to be more similar than those of twelve-year-olds and their teachers. This tendency is especially characteristic of situations frustrating primarily for the self, when it comes to situations frustrating primarily for the peer, the difference is less marked. Decreasing similarity is a finding of our previous studies as well: the correlation is the strongest in the junior grades (Zsolnai, & Kasik, 2007), shows a decreasing tendency in the senior grades[1] (Kasik, 2008), and it is the lowest in high school (Kasik, 2010). To have details on the relationship between students' and teachers' opinion is of vital importance, because - as pointed out by Chen (2006) - the success of a development programme depends largely on how much students' and teachers' opinions overlap. Effect studies of several such programmes corroborate this: effect sizes are getting smaller with age.

As for social background, our data suggest that mothers' educational qualifications are not strongly related to children's coping strategies in none of the age-groups. At the age of 12, this relationship is significantly weaker than in the two younger groups. Therefore, it is assumed that mothers' highest qualification is not the background variable having the greatest effect on strategy choice. Fiske (2004) proposes that it is rather the models offered by both parents, however, this cannot entirely be dissociated from qualifications, as it is established that parents' educational methods and the highest level of education show correlation of medium strength (Schneider, 1993; Grusec, & Hastings, 2007).

The realization of the study, though, raises dilemmas to be considered before any further research. The most important of these might be the question of gender- and relationship-based ratings. Our present study has not revealed if children rate situations differently if a given behaviour belongs to a friend (or a 'neutral' peer), and if that friend (or 'neutral' peer) is a girl or a boy. Such a fine differentiation seems to be desirable, as it is the central dilemma of other studies dealing with social behaviour, like studies of social problem solving and help (Fiske, 2004; Nezu, 2004; Morera et al., 2006). It is also an important question if the reports of kindergarten teachers, junior grade teachers and senior grade teachers are comparable, as they spend different amounts of time with children, and teaching situations are not the same, either.

Beyond these dilemmas, we are positive that the findings of this study offer useful information on how children treat social situations that occur in everyday school life, what strategies they apply and how teachers perceive children's strategy choices. This kind of information might be useful both for further research and development programmes.

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Note

[1] In Hungary, elementary grades are divided into junior (1st to 4th) and senior (5th to 8th) grades.

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Tables

Table 1 Frustrating situations

Frustrating for the self	*Frustrating for a peer*
personal property being taken away	peer's personal property being taken away
being physically mistreated by a peer	peer being physically mistreated
being annoyed by a peer	peer being annoyed by another
being mocked by a peer	peer being mocked by another
being scolded by teacher (for misbehavior)	peer being scolded by teacher (for misbehavior)
being scolded by teacher (for unsatisfactory work)	peer being scolded by teacher (for unsatisfactory work)
being disturbed by a peer (while studying)	peer being disturbed by another (while studying)
being disturbed by a peer (while playing)	peer being disturbed by another (while playing)
refusing to do a task (does not want to do it)	peer refusing to do a task (does not want to do it)
refusing to do a task (cannot do it)	peer refusing to do a task (cannot do it)
–	peer tripping over

Table 2 Situations frustrating for the self – self- report data and teachers'ratings (analysis of variance)

No.	*Description*	*Significant difference between subsamples-children ($p<0.05$)*	*Significant difference between subsamples-teachers ($p<0.05$)*
1.	Personal property being taken away	{8, 10} ↔ {12}	n. s.
2.	Refusing to do a task (does not want to do it)	n. s.	n. s.
3.	Refusing to do a task (cannot do it)	n. s.	n. s.
4.	Being disturbed by a peer (while studying)	n. s.	{8, 10} ↔ {12}
5.	Being disturbed by a peer (while playing)	{8} ↔ {10, 12}	{8, 10} ↔ {12}
6.	Being mocked	{8} ↔ {10, 12}	n. s.
7.	Being scolded by teacher (for unsatisfactory work)	n. s.	n. s.
8.	Being scolded by teacher (for misbehavior)	n. s.	n. s.
9.	Being physically mistreated by a peer	{8} ↔ {10, 12}	{8, 10} ↔ {12}
10.	Being annoyed by a peer	n. s.	n. s.

Note: ↔ significant difference in strategy choice; n. s. not significant

Table 3 Situations frustrating primarily for the self – strategy choice (student and teacher, 8-year-old, %)

Description	*Strategy choice – self-report*									*Strategy choice – teacher- report*								
	TS	VA	PA	AV	VE	FN	RE	TI	PS	TS	VA	PA	AV	VE	FN	RE	TI	PS
Property taken away	35	26	14	6	8	6	2	0	3	n. s.								
Disturbed by peer (studying)	n. s.									66	25	5	0	2	1	0	0	1
Disturbed by peer (playing)	36	25	10	5	6	9	4	0	5	40	31	12	3	3	7	1	0	3
Being mocked	49	9	5	1	25	3	0	0	8	n. s.								
Being physically mistreated	40	12	28	4	5	8	0	0	3	43	12	22	5	5	6	3	0	4

Note: TS=seeking teacher's help; VA=verbal aggression; PA=physical aggression; AV=avoidance; VE=venting; FN=following the norms; RE=resistance; TI=following teacher's instructions; PS=seeking peer help, n. s. not significant; Strategies having a summed explanatory power of more than 60 percent are marked in gray.

Table 4 Situations frustrating primarily for the self – strategy choice (student and teacher, 10-year-old, %)

Description	*Strategy choice – self-report*									*Strategy choice – teacher report*								
	TS	VA	PA	AV	VE	FN	RE	TI	PS	TS	VA	PA	AV	VE	FN	RE	TI	PS
Property taken away	34	22	12	10	6	5	5	0	6	n. s.								
Disturbed by peer (studying)	n. s.									52	20	9	3	2	5	3	0	7
Disturbed by peer (playing)	10	14	36	5	2	30	2	0	1	32	42	10	5	2	5	0	0	4
Being mocked	5	34	15	2	3	32	4	0	5	n. s.								
Being physically mistreated	5	10	54	2	2	21	4	0	2	36	15	30	3	2	2	3	0	9

Note: TS=seeking teacher's help; VA=verbal aggression; PA=physical aggression; AV=avoidance; VE=vening; FN=following the norms; RE=resistance; TI=following teacher's instructions; PS=seeking peer help, n. s. not significant; Strategies having a summed explanatory power of more than 60 percent are marked in gray.

Table 5 Situations frustrating primarily for the self – strategy choice (student and teacher, 12-year-old, %)

Description	*Strategy choice – self-report*									*Strategy choice – teacher report*								
	TS	VA	PA	AV	VE	FN	RE	TI	PS	TS	VA	PA	AV	VE	FN	RE	TI	PS
Property taken away	5	49	11	1	0	5	2	1	26	n. s.								
Disturbed by peer (studying)	n. s.												42		36			
Disturbed by peer (playing)	1	20	35	5	1	30	2	1	5	1	63	20	0	2	5	2	1	5
Being mocked	2	42	20	2	1	30	1	0	2	n. s.								
Being physically mistreated	3	9	60	3	2	18	0	0	5	2	18	50	0	0	3	1	1	25

Note: TS=seeking teacher's help; VA=verbal aggression; PA=physical aggression; AV=avoidance; VE=vening; FN=following the norm; RE=resistance; TI=following teacher's instructions; PS=seeking peer help, n. s. not significant; Strategies having a summed explanatory power of more than 60 percent are marked in gray.

Table 6 Situations frustrating primarily for the self – gender differences by age, self report data and teachers' ratings

No.	Description	8-year-old		10-year-old		12-year-old	
		Self-report	Teacher - report	Self-report	Teacher-report	Self-report	Teacher - report
1.	Personal property being taken away	↔	↔	↔	↔	↔	↔
2.	Refusing to do a task (does not want to do it)	↔	n. s.	↔	↔	↔	↔
3.	Refusing to do a task (cannot do it)	n. s.	n. s.	↔	n. s.	↔	n. s.
4.	Being disturbed by a peer (while studying)	n. s.	n. s.	↔	n. s.	n. s.	n. s.
5.	Being disturbed by a peer (while playing)	↔	n. s.	n. s.	n. s.	n. s.	n. s.
6.	Being mocked	↔	↔	↔	↔	↔	n. s.
7.	Being scolded by teacher (for unsatisfactory work)	n. s.	n. s.	n. s.	n. s.	n. s.	n. s.
8.	Being scolded by teacher (for misbehavior)	n. s.	n. s.	n. s.	n. s.	n. s.	n. s.
9.	Being physically mistreated by a peer	↔	↔	↔	↔	↔	↔
10.	Being annoyed by a peer	↔	n. s.	↔	n. s.	↔	n. s.

Note: ↔ significantly different strategy choice between girls and boys; n. s. not significant

Table 7 Situations frustratin for a peer – self report data and teachers'ratings (analysis of variance)

No.	Description	Significant difference between subsamples-children ($p<0.05$)	Significant difference between subsamples-teachers ($p<0.05$)
1.	Peer's property being taken away	{8, 10} ↔ {12}	{8, 10} ↔ {12}
2.	Peer refusing to do a task (does not want to do it)	n. s.	n. s.
3.	Peer refusing to do a task (cannot do it)	n. s.	n. s.
4.	Peer being disturbed by another (while studying)	n. s.	n. s.
5.	Peer being disturbed by another (while playing)	n. s.	n. s.
6.	Peer being mocked	n. s.	n. s.
7.	Peer being scolded by teacher (for unsatisfactory work)	n. s.	n. s.
8.	Peer being scolded by teacher (for misbehavior)	n. s.	n. s.
9.	Peer being physically mistreated by another	{8, 10} ↔ {12}	{8, 10} ↔ {12}
10.	Peer being annoyed by another	{8} ↔ {10, 12}	n. s.
11.	Peer crying	{8} ↔ {10, 12}	{8} ↔ {10, 12}

Note: ↔ significantly different strategy choice; n. s. not significant

Table 8 Situations frustrating primarily for a peer – strategy choice (student and teacher, 8-year-old, %)

Description	*Strategy choice – self-report*									*Strategy choice – teacher report*								
	TS	VA	PA	AV	VE	FN	RE	TI	HS	TS	VA	PA	AV	VE	FN	RE	TI	HS
Peer's property being taken away	5	5	1	10	2	46	26	2	3	5	2	2	19	5	65	0	1	1
Peer being mistreated	10	3	2	35	1	42	2	1	4	40	5	5	5	4	25	3	10	3
Peer being annoyed	41	10	5	5	1	32	4	0	5	n. s.								
Peer crying	55	2	2	6	1	2	5	2	25	55	2	3	3	3	4	4	4	32

Note: TS=seeking teacher's help; VA=verbal aggression; PA=physical aggression; AV=avoidance; VE=venting; FN=following the norms; RE=resistance; TI=following teacher's instructions; HS=helps himself/herself (=direct help); n. s. not significant; Strategies having a summed explanatory power of more than 60 percent are marked in gray.

Table 9 Situations frustrating primarily for a peer – strategy choice (student and teacher, 10-year-old, %)

Description	*Strategy choice – self-report*									*Strategy choice – teacher report*								
	TS	VA	PA	AV	VE	FN	RE	TI	HS	TS	VA	PA	AV	VE	FN	RE	TI	HS
Peer's property being taken away	4	8	3	10	1	46	24	2	2	8	3	2	35	0	50	0	0	2
Peer being mistreated	8	5	2	40	2	36	3	2	2	5	35	30	5	2	10	3	5	5
Peer being annoyed	8	40	2	25	3	15	4	1	2	n. s.								
Peer crying	8	2	1	37	1	2	3	1	45	15	3	2	35	3	3	35	2	2

Note: TS=seeking teacher's help; VA=verbal aggression; PA=physical aggression; AV=avoidance; VE=veting; FN=following the norms; RE=resistance; TI=following teacher's instructions; HS=helps himself/herself (=direct help) ; n. s. not significant; Strategies having a summed explanatory power of more than 60 percent are marked in gray.

Table 10 Situations frustrating primarily for a peer – strategy choice (student and teacher, 12-year-old, %)

Description	*Strategy choice – self-report*									*Strategy choice – teacher report*								
	TS	VA	PA	AV	VE	FN	RE	TI	HS	TS	VA	PA	AV	VE	FN	RE	TI	HS
Peer's property being taken away	4	35	6	35	1	10	3	2	3	4	30	39	12	2	13	15	5	10
Peer being mistreated	3	35	36	12	0	8	2	2	2	5	30	54	5	0	0	5	0	1
Peer being annoyed	5	48	10	32	0	10	2	2	1	n. s.								
Peer crying	7	5	1	35	3	4	0	1	44	2	6	2	35	2	2	40	1	10

Note: TS=seeking teacher's help; VA=verbal aggression; PA=physical aggression; AV=avoidance; VE=venting; FN=following the norms; RE=resistance; TI=following teacher's instructions; HS=helps himself/herself (=direct help) ; n. s. not significant; Strategies having a summed explanatory power of more than 60 percent are marked in gray.

Table 11 Situations frustrating for a peer – gender differences by age, self-report data and teachers' ratings

No.	*Description*	*8-year-old*		*10-year-old*		*12-year-old*	
		Self-report	*Teacher-report*	*Self-report*	*Teacher-report*	*Self-report*	*Teacher-report*
1.	Peer's property being taken away	n. s.	n. s.	n. s.	n. s.	↔	↔
2.	Peer refusing to do a task (does not want to do it)	n. s.	n. s.	↔	n. s.	↔	n. s.
3.	Peer refusing to do a task (cannot do it)	n. s.	n. s.	n. s.	n. s.	n. s.	n. s.
4.	Peer being disturbed by another (while studying)	n. s.	n. s.	n. s.	n. s.	n. s.	n. s.
5.	Peer being disturbed by another (while playing)	n. s.	n. s.	n. s.	n. s.	n. s.	n. s.
6.	Peer being mocked	n. s.	↔	n. s.	↔	n. s.	n. s.
7.	Peer being scolded by teacher (for unsatisfactory work)	n. s.	n. s.	n. s.	n. s.	n. s.	n. s.
8.	Peer being scolded by teacher (for misbehavior)	n. s.	n. s.	n. s.	n. s.	n. s.	n. s.
9.	Peer being physically mistreated by another	n. s.	n. s.	↔	n. s.	↔	n. s.
10.	Peer being annoyed by another	n. s.	↔	n. s.	n. s.	n. s.	n. s.
11.	Peer crying	↔	n. s.	n. s.	n. s.	n. s.	↔

Note: ↔ significantly different strategy choice between

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